

LINCOLN LORE

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PIKE'S ARITHMETIC

We are including Pike's arithmetic in the list of school books Lincoln used, solely on the statement of William Herndon. What his authority was for placing this text in his list of Lincoln's school books he does not state.

After making a comparative study of the text of Pike's arithmetic and the copy book Lincoln made we have been unable to find but one point of direct contact.

Facsimiles of several pages of this interesting hand made book of sums are before us. As in most cases where such books were prepared they were copied either directly from an arithmetic or used in the class room to copy problems presented by the teacher. The last method amounted to the same as the first as the teacher undoubtedly used the same text as a source book.

The question in point is: What was the original text used by either Lincoln or his school teacher which served as a source for the data in the copy book?

It has been suggested by some Lincoln authorities that Pike's arithmetic is the only one mentioned as having been used by the president in his primary education.

Buried in the great mass of eulogies prepared at the time of Lincoln's assassination is one delivered before the New England History-Genealogical Society at Boston on May 3, 1865, by Elias Mason. In his very interesting and reliable biographical sketch of the martyred president, he states that:

"It is true that young Lincoln in his buckskin clothes and racoon-skin cap did pick up a little of 'Dobell's arithmetic'."

A typographical error has evidently been made here in the spelling of the name of the compiler of the arithmetic as the author of the first American textbook on arithmetic was named Nathan Daboll. For many years in the latter part of the eighteenth century this was the only text book on mathematics in America.

Whether or not the problems which Lincoln copied in his sum book are in agreement with those in Daboll's arithmetic we are not informed but they do not appear to be copied from Pike's. But one apparent agreement has been discovered which seems to suggest a common origin of form used, "I demand, etc."

In Lincoln's copy book this writing appears:

"An army of a 10000 men having plundered a city took so much money that when it was shared among them each man had £27. I demand how much was taken in all."

Pike's arithmetic puts a problem in this way:

"A shopkeeper sold 13 yards of cloth, on the following terms: viz. 2d. for the first yard, 4d for the second, 8d for the third, &c; I demand the price of the cloth."

Isaac N. Arnold, one of the early biographers of Lincoln, makes this

The
New Complete System
of
ARITHMETIC
composed for
The Use of the Citizens of the United States
By NICHOLAS PIKE, A.M.
Member of the American Academy of Arts and
Sciences
Abridged for the Use of Schools
Fifth Edition
BOSTON
Printed by J. T. Buckingham
For Thomas & Andrews
Sold at their Book Store, No. 45 Newbury
Street, and by the book sellers through-
out the United States
October, 1804

statement in a foot note:

"I have in my possession, a few pages from his manuscript 'Book of Examples in Arithmetic.' One of these is dated March 1, 1826, and headed 'Discount', and then follows in his careful handwriting, first: 'A definition of Discount,' second: 'Rules for its computation,' third: 'Proof and various Examples,' worked out in figures etc.; then 'Interest on money' as treated in the same way, in all his own handwriting. I doubt whether it would be easy to find among scholars of our common or high schools, or any school of boys of the age of seventeen, a better written specimen of this sort of work, or a better knowledge of figures than is indicated by this book of Lincoln's, written at the age of seventeen."

It is not the purpose of this broadside, however, to discuss Lincoln's copy book, except as we might hope to find some evidence that Pike's arithmetic was the original source. In this effort we seem to have found little evidence to support its supposition.

Lincoln's last school teacher Azel W. Dorsey is said to have described his illustrious student as coming to the log cabin school house, "provided with an old arithmetic which had somewhere been found for him to begin his investigations into the 'higher branches'." This reminiscence does not state the name of the arithmetic Lincoln brought to school.

Pike's arithmetic was first issued in 1788 by Nicholas Pike, A.M., A.A.S. The book went into several editions. The copy before us was published in 1804 and is the fifth edition of the text. It was twenty years later than this, that Lincoln studied arithmetic and if he used the work of Pike the book may have been a revised later edition.

On page 34 appears that familiar old chant of the seasons:

"Thirty days hath September, April, June, and November,

February 28 alone, and all the rest have 31."

Followed by the notation:

"When you can divide the year of our Lord by four, without any remainder, it is then Bissextile, or Leap Year, in which February has 29 days."

The book contains in addition to the customary measures, and tables of weights, an ale or beer measure and a wine measure,—as well as a cloth measure in which "four nails make one quarter yard."

Dry measure according to a note is applied to all "dry goods, as corn, seed, fruits, roots, salt, sand, oysters, and coals."

Other interesting sections are those on single and double fellowship, dealing with problems of men who "share the same grazing pasture, and barn."

The book contains several queerly worded problems and many "catch" propositions also find their way into the quaint volume. For instance:

"Nine gentlemen met at an inn, and were so pleased with their host and with each other, that in a frolic they agreed to tarry so long as they, together with their host, could sit every day in a different position at dinner; pray how long, had they kept their agreement, would their frolick have lasted?"

Again: "Suppose a number of stones were laid a yard distant from each other for the space of a mile, and the first, a yard from a basket; what length of ground will that man travel over, who gathers them up singly, returning with them one by one to the basket?"

Could our popular present-day Potato race have been derived from this old problem?

The Rule of Three

The calculus of proven mathematics was the "Rule of Three." To this Abraham Lincoln aspired. The Rule of Three was the method of finding a fourth term of a proportion when three are given. The numbers being so arranged that the first is to the second as the third is to the fourth, which test is that term required to be found. Abraham proceeded by multiplying the second and third terms together and dividing the product by the first. This seems to have been the climax of Lincoln's primary education.